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A Study of Scholastic Achievement of Selected Veterans at the College of William and Mary.

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A STUDY OF SCHOLASTIC ACHIEVEMENT

of

SELECTED VETERANS

at the

COLLEGE OF WILLIAM AND MARY

by

ROLAND E. SYKES

1948

SUBMITTED IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS

of

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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

"Oh, show me how a rose can shut and be a bud again!"
Nay, watch my Lords of the Admiralty,
For they have the work in train.
They have taken the men that were careless lads
At Dartmouth in 'Fourteen
And entered them at the landward schools
As though no war had been.
They have piped the children off all the seas
From the Falklands to the Bight,
And quartered them on the Colleges
To learn to read and write! 1

Kipling's borrowed poetical query concerning "Some hundreds of
2
the younger naval officers", who were sent back to Cambridge after
World War I, sums up the questions which were in the minds of many
educators at the prospect of literally millions of veterans returning
to, or entering for the first time, our institutions of higher
learning at the close of World War II. Before stating the problem in
a more prosaic manner it might be well to look into the history of
education as a means of veteran adjustment to peaceful society.

I BACKGROUND

The adjustment of veterans to peaceful society has been a
major problem after wars in all but the more primitive or simple
societies. Here the arts of war and peace are very similar.

1 Rudyard Kipling, "The Scholars" (1919), Rudyard Kipling's Verse, (definitive edition; Garden City, New York: Doubleday, Doran and Company, Inc., 1942), p. 803.

2 Ibid., p. 803.

In more complex societies, according to Waller,

The veteran is, and always has been a problematic element . . . and like others whom society has mistreated, a threat to existing institutions Unless and until he can be renaturalized into his native land, the veteran is a threat to society. 3

Waller suggests that educational institutions can be, because of their better adaptability than any other institutions, the "best possible bridge" from army to civilian life for younger soldiers. 4

Education as a solution to the adjustment problems of soldier veterans is not new. 5 Wector cites the attempts at education of two Revolutionary War soldiers. It is rather common historical knowledge that Alexander Hamilton completed the study of law in four months after his leaving the army. Such attempts at adjustment were entirely on the responsibility of the veterans themselves.

After our Civil War thousands of men went to colleges both North and South. 6 Wector devotes much of one chapter to anecdotes concerning the veterans of this war as college students. These veterans were apparently good students once they overcome their initial awkwardness at returning to books.

Veterans of World War I flocked to our colleges and universities in 1919. The total number is not known. It is known,

3 Willard Waller, Veteran Comes Back (New York: The Dryden Press, 1944), pp. 12-13.

4 Ibid., p. 151.

5 Dixon Wector, When Johnny Comes Marching Home (Cambridge, Massachusetts: Houghton Mifflin Company, 1944), pp. 43-46 and 93-94.

6 Ibid., pp. 172-177.

however, that the government sponsored the rehabilitation of 179,515⁶ disabled veterans in schools of one kind or another. There is in the literature a limited amount of objective data on how well these veterans performed in school and also their post graduate achievements. These data will be quoted in the following chapter.

This sponsoring of education by the government after World War I established a precedent for Public Law 16 and Public Law 346 of World War II.

The passage by the 78th Congress of Public Law 16 assured that colleges would receive a portion of disabled veterans for rehabilitation. This number would not have taxed the facilities of the colleges to any great extent, but with the passage of Public Law 346, especially⁷ Title II, Chapter IV, part VIII, and the subsequent amendments, conjecture immediately began on just how many veterans would return to college. Predictions varied.

Examples of these predictions and a follow-up of the actual facts prove interesting. In January 1945, General Hines, Veterans' Administrator said, "There is, of course, no way of exactly estimating the number." He then went to say that hardly more than 650,000 will enter college, and that the peak load for colleges will be reached in a year to a year-and-a-half after the defeat of Germany

⁶ Willard Waller, Veteran Comes Back (New York: The Dryden Press, 1944), p. 316.

⁷ Service Mens Readjustment Act of 1944 and The Act Providing for Vocational Rehabilitation of Disabled Veterans; House Committee Print Number 120, (Washington, D. C.: United States Government Printing Office, 1946), pp. 6-11 and 31-34.

8

and Japan.

Ritchie, in August 1945, said,

There is abundant evidence that veterans will go back in large numbers. The writer has talked to thousands of servicemen concerning postwar training and is convinced that most estimates of the prospective size of the veteran group in school after the war are not overly optimistic. 9

The United States Office of Education in 1945 estimated that 3,500,000 veterans planned some education, but that only 1,000,000 of these would be in college full-time. 10

General Bradley, Veterans Administrator, on March 25, 1946, estimated the college enrollment of veterans would number about 750,000 in the fall of that year. 11

In the summer of that same year Benjamin Fine published a survey on enrollment in 547 mens' liberal arts colleges. Ninety per cent of the schools responded. They had at that time 400,000 veterans on campus and expected 800,000 in the fall term. Fine then went on to predict that colleges in the United States could expect to have 5,000,000 ex-servicemen on their campuses in the next decade. This

8 Frank T. Hines, Brigadier General, United States Army, "Veterans and Universities," Journal of American Association of College Registrars, 20:175-183, January, 1945.

9 Miller A. F. Ritchie, Lieutenant, United States Naval Reserve, "Veterans as a Postwar Student," Southern Association Quarterly, 9:295-305, August, 1945.

10 John N. Andrews, "Veteran Goes to College," Survey Graphic, 34:402-406, October, 1945.

11 William Chandler Bagely, "Three Quarters of a Million Veterans Will be in the Colleges Next Fall-Or Will They?" School and Society, 63:237, April, 1946.

would be one fourth of all veterans eligible for education or training under the so-called G. I. Bill (Public Law 346).¹²

Actually there were in colleges during 1946 and 1947, 1,575,000 veterans and this is not to be the limit. According to the Dean of Rutgers University School the peak of 3,000,000 veterans in school will not be reached till 1950. By 1960 veteran enrollment will have ceased.¹³ This last statement has since been modified by an Act of Congress which terminates all veterans educational programs as of July 25, 1956. Of course, some veterans may still be in college but as the law now stands, not under government subsidy.

With so many veterans entering institutions of higher learning, the question naturally arose as to how they performed in the school atmosphere. In the fall term of 1945 there were already veterans attending classes at the College of William and Mary. By the spring term of 1946 there were sufficient numbers to warrant a study being made of their achievement in school.

II THE PROBLEM

Statement of the problem. The purpose of this study is to investigate the performance of veterans in their classes at the College of William and Mary as revealed by their scholastic marks during the fall semester of 1945 and spring semester of 1946.

¹² Benjamin Fine, "Boom in Education," Pic, The Magazine For Young Men, 18:26-27, August, 1946.

¹³ Veterans at College, Life Magazine, 22:105-113, April 21, 1947.

It is recognized that there are factors in healthy adjustment to college life other than scholastic marks, but this study is not concerned with the other phases of college existence. The problem is broken down into the following sub-problems.

1. A statistical description and account of the veteran population in William and Mary, 1945-1946.
2. A comparison of the achievement of veterans during their last semester of college work before entering service with their achievement in their first semester of class work after service.
3. A comparison of the achievement in class work in the first full semester after service with the second full semester after service.
4. A comparison of the achievement of married veterans with the unmarried veterans.

Definition of terms:

1. Veteran: Throughout this study veteran means any male student enrolled in the College of William and Mary under the auspices of either Public Law 16 or Public Law 346 during 1945 and 1946. It is recognized that some men may be veterans, but not enrolled under either of the two laws mentioned above. Such veterans are not included in this investigation.
2. Achievement: This term refers to the degrees of success or failure in class work at the college. In this study such achievement was measured by the system of quality point averages in use in the Counseling Office at the College of William and

Mary. This system is designed to reflect failure in the total quality point average. The reader is cautioned not to compare these quality point averages with the regular college quality point averages without taking into consideration that in the system used in this study a grade of F carries a minus one quality point for each credit failed. The rest of this system does not vary from that employed by the Registrar's Office at the College of William and Mary wherein a grade of A receives three quality points for each credit, B receives two quality points for each credit, C receives one quality point for each credit, and D receives zero quality points.

Source and treatment of data. The data for this investigation ^{were} ~~was~~ obtained from three sources. The original list of veterans was obtained from the Veteran's Advisors Office at the college. Quality point averages and other information were collected from the Counseling Office and the data made complete by facts obtained from the Office of the Registrar. The method of treatment of the data is statistical.

The data were classified into various groups; means and standard deviations were computed and, for the comparison studies, the T or critical ratio test of significance was applied. A more detailed account of the data, source collection, and treatment appears in Chapter III.

Although the study is not now as timely as when first begun there is still need for a study of the local situation. Even to date,

not too many studies of a statistical nature have been published as will be noticed by a perusal of Chapter II of this thesis.

Certain of the findings are in disagreement with reported studies and therefore reveal the need of further studies on the same lines. Other reported studies are substantiated by the findings reported here. A review of these studies follows in the next chapter.

CHAPTER II

REVIEW OF THE LITERATURE

At the time that this study was begun, little writing had been published on the problem of the academic achievement of veterans. Of this little, almost nothing was of an objective nature. Much of it was based on opinion and conjecture.

There is at the time of the completion of this thesis a number of such studies. Some go beyond the scope of this study. They are here reported to reveal the limitations of this work and to furnish suggestions for further research on the experience of veterans in college. For convenience the studies are arranged under headings such as age, comparison of veterans and non-veterans, etc. With this system some studies are mentioned several times in this chapter.

Literature predicting performance of veterans as students.

The history of performance in colleges and universities gave some¹ inkling of what might be expected of the modern veteran. Wector quotes the case of Captain J. C. Clark who went to Ohio Wesleyan University at the close of our Civil War. The veterans there averaged three years older than other collegians. Clark had difficulty in studying at first but he says, "gradually my mental machinery² unlimbered." He was able to be graduated in 1868 with honors. With

¹ Dixon Wector, When Johnny Comes Marching Home. A Life in American Prize Book. Cambridge: Houghton Mifflin Company, 1944. 588 pp.

² Ibid., p. 174.

a collection of further anecdotes Wector makes the point that the Civil War veteran did make a good student. In World War I, Wector mentions the schools held by the American Expeditionary Forces and quotes Secretary of War Baker as saying of the student soldiers that,³ "their concentration of attention is marvelous." Apparently not all of them were serious students however for many simply wanted to get to Paris; one of them John Dos Passos, in later years said to Professor⁴ Erskine that he, "wasn't even sure where the classroom was."

Of these same World War I soldiers as veteran students Wector says, "They came flocking into American Universities in the summer and autumn of 1919 This army wanted to conquer the citadels of⁵ ignorance." Federal aid was granted to disabled men and these proved to be good students, showing a devotion to their studies. At⁶ Stanford, only six out of 89 were below passing in 1921 and 1922.

From the historical evidence it would seem that the veteran of World War II should succeed as a college student, but account must be taken of the fact that those veterans going to school after other wars were a select few as compared to the large numbers who sought admission to our colleges at the close of World War II.⁷

Of these veterans of World War II Sackett predicted they

³ Ibid., p. 265.

⁴ Ibid., p. 268.

⁵ Ibid., p. 269.

⁶ Ibid., pp. 402-403.

⁷ E. B. Sackett, "Fitting the Veteran to the Academic World," Occupations, 22:471-474, May, 1944.

would achieve more than peace time students of like ability. Tyler⁸ and Detchen recognizes that military service may have contributed⁹ to the veterans' growth. Waller remarked that the veteran resents the assumption of immaturity, but that he is immature; will have lost much interest in his studies, and he will rebel against authority.

The veteran, picked for adaptability to the demands of war, according to Wector should be adaptable to peace. They should adjust readily to campus life.¹⁰

Tenney¹¹ warns against the early returnee who may be maladjusted and cause trouble. These are not the normal, ordinary veterans. The fact of their early discharge often warns of previous inability to adjust.

Hines¹² believed the veteran would have to learn over again to study while in the same year Ritchie points out that most men in the service were in continual training, had learned its value, and were

⁸ Ralph Tyler and Lily W. Detchen, "Evaluation of Educational Growth During Military Service," Public Personnel Review, 5:95-100, April, 1944.

⁹ Willard Waller, Veteran Comes Back. New York: Houghton Mifflin Company, 1944. 316 pp.

¹⁰ Dixon Wector, When Johnny Comes Marching Home. A Life in America Prize Book. Cambridge: Houghton Mifflin Company, 1944. 489 pp.

¹¹ Luman H. Tenney, "Psychological Problem of the Discharged Veteran," American Association College Registrars Journal, 20:443-451, July, 1945.

¹² Frank T. Hines, Brigadier General, "Veterans and Universities," Journal of American Association College Registrars, 20:175-183, January, 1945.

motivated in the service to be better students although impatient for
¹³
 speed.

¹⁴
 Pearson thought that the veteran would be as varied in his
 classroom actions as the situations he faced and that there would be
 two types of veteran students, the self-starting officer veteran and
 the rank and file veteran who would need much ordering.

¹⁵
 Russell basing his judgement on the soldier at the University
 centers established at Shriveham, England and Biarritz, France,
 prognosticated the veteran would return easily to academic life.

¹⁶
 Spearman and Brown thought the veteran would have trouble
 adjusting to studying.

Most of these studies were based on personal observation and
 judgement with little or no objective data as a basis for opinion.
 The consensus of this seems to enertain some reasonable doubt as to
 the veteran becoming a good student immediately upon return to
 college, and stresses a need for adjustment which the veteran may find
 difficult.

Non-statistical literature on actual performance of veterans.

¹³ Miller A. F. Ritchie, "Veterans and Universities," Journal
 of American Association College Registrars, 20:175-183, January, 1945.

¹⁴ G. Pearson, "Veteran Versus the Professor," School and
 Society, 62:131-133, September 1, 1945.

¹⁵ John Dale Russell, "G. I's at College," National Parent and
 Teachers, 40:16-18, April, 1946.

¹⁶ Walter Spearman and Jack R. Brown, "When the Veteran Goes to
 College," Southern Atlantic Quarterly, 45:31-42, January, 1946.

17

Justice, in an opinion questionnaire to veterans found that veterans felt that allowance should be made in marking them on their first semester back at school. Apparently, they felt that they needed a little time to adjust to do their best work.

18

Goetsch remarks that the veteran at the University of Iowa was a good serious student. Webb and Atkinson found the veteran had "academic irregularities",¹⁹ but that he was no special problem. His success at school was conditioned by the length of time since he was last in school.

20

Hadley, writing in "School and Society", says,

It is now a reasonably established fact that the past scholastic records and even test data accumulated during high school years are not very valid in terms of predicting what the veteran will do upon his return . . . in spite of deficiencies and weaknesses in basic skills, many of these veterans do produce on higher scholastic levels than their previous records indicate, or than one would predict from placement-test results.

This quotation revealed the possible unreliability of time-honored means of predicting scholastic success in college. Hadley²¹ explains this upset by giving the characteristics common to most veterans with

17 Thurman G. Justice, "What Happens to the Veteran in College," Journal of Higher Education, 17:185-188, April, 1946.

18 W. A. Goetsch, "Veteran Returns to College," Journal of American Association of College Registrars, 21:359-365, April, 1946.

19 Robert W. Webb and Byron H. Atkinson, "The Veteran is in College," Journal of Higher Education, XVII:238-242, 282, May, 1946.

20 Loren S. Hadley, "To What Extent Will Colleges Adjust to the Needs of Veterans?" School and Society, 63:324, May 4, 1946.

21 Ibid., pp. 323-325.

whom he had come in contact. He says the veteran has a maturity greater than his years, a purposiveness in choice of a career, and a desire to get ahead, a faith in formal education, and a dread of placement tests. ²² Simmons agrees with Hadley on the difficulty of predicting success or failure of veterans. He suggests that, for many, marriage has a sobering influence. For many, the prospects of military service affected the quality of work performed in school before entering service.

In a popularly written account of the veteran at Harvard, President Conant, is quoted as designating the veteran as "the most ²³ mature and promising students Harvard has ever had."

²⁴ Sabine found the veteran more serious and doing better work than his civilian counterpart. ²⁵ Miner says he is "more mature, more independent, more indifferent, more restless, and more critical." For the most part he is doing scholarly work but must be judged on an individual basis.

The fact that seventy-five out of every 200 veterans fail

²² George E. Simmons, "The Veterans as I See Them," Journal of Higher Education, XVII:315-318, June, 1946.

²³ Charles J. V. Murphy, "G. I's at Harvard," Life Magazine, XX-24:16-22, June 17, 1946.

²⁴ Gordon A. Sabine, "An Idea that Worked," Foreign Service, 34-1:17-19, September, 1946.

²⁵ Robert J. Miner, "How Fares the Veteran," Journal of American Association of College Registrars, 22:159-163, January, 1947.

integrated courses even though they did adequate work in other
²⁶
 courses is questioned by MacMahon. He concludes that the teacher
 is at fault, being too much a specialist.

The foregoing studies although based actually on specific
 groups of veteran students are nearly all of a subjective nature.
 These studies reveal the impressions that the veterans made in the
 colleges during the years 1945, 1946, and early 1947. The veteran was
 proving to be a good student and somewhat better than his non-veteran
 fellow student. He was doing a higher quality of work than he did
 prior to service.

Statistical literature on actual performance of veterans. For
 convenience in comparing studies and data from the various studies it
 was decided to report these statistical studies in separate
 categories as explained on page 9 of this chapter. This device makes
 it possible to view the results of the literature in like units. As
 a result some studies will be reviewed more than once as they may have
 dealt with problems in several of the categories.

I STUDIES ON AGE

Twelve of the studies took age into account in one manner or
²⁷
 another. Wright at Indiana University found the veteran to average
 three years and four months older than men in pre-war classes.

²⁶ Donald Hutchins MacMahon, "Vets into Students," School and Society, 64:204-206, September 21, 1946.

²⁷ Wendell W. Wright, "Data on Veterans now Enrolled in Indiana University," School and Society, 61:245-246, April 26, 1945.

28

Seventy-two veterans in a study course operated by Kinzer had an age range from nineteen to forty-two, with a median age of twenty-four years. Anderson, in a four-year Junior College, records an age distribution of from sixteen to forty-eight, with an average age of 22.31 years.

30

Murphy says that the average age of veterans on admission at Harvard in 1945 and 1946 was 23 and one-half years. One was in his forties, several in their thirties, with ten per cent in the twenty-five to twenty-eight year level. Welborn compares veterans with non-veterans in a teachers college and finds that the median age of the first is 23.4, and the latter 19.9. One hundred nine veterans and ninety-two civilians were in the population of this study.

32

Love and Love in a study of performance of eighty veterans entered at Ohio State University on the basis of General Education Development Tests found the ages to range from 18 to thirty years, with a median age of 21.9, a quartile 1 of 20.6, and a quartile 3 of

28 John R. Kinzer, "Veteran and Academic Adjustment," Educational Research Bulletin, 25:8-12, January, 1946.

29 John A. Anderson, "Veterans in a Four Year Junior College," Journal of American Association of Collegiate Registrars, XXI-2:205-210, January, 1946.

30 Charles J. V. Murphy, "G. I's at Harvard," Life Magazine, XX-24:16-22, June 17, 1946.

31 Ernest L. Welborn, "Scholarship of Veterans Attending A Teachers College," Journal of Educational Research, 40-3:209-214, November, 1946.

32 L. S. Love and L. E. Love, "Performance of Veterans," Journal of Higher Education, 18:95-98, February, 1947.

24.6.

In a comparison of the characteristics of veteran and non-
³³
 veteran students, Tibbetts and Hunter, at the University of
 Michigan, analyzed the ages of both for each term from the summer of
 1944 through the fall of 1946. They found difference in the ages of
 the two groups to range from six months in summer of 1946 to three
 years and five months during spring term of 1946.

³⁴
 Germezy and Crose in a matched study of achievement of 245
 veterans and 245 non-veterans found a mean for age of veterans of 22.8
 years, for non-veterans a mean of 19.5 years. The standard deviation
 of veterans was 2.12 years and of non-veterans .83 years. In an
 analysis of 2,144 veterans which represented half of the veterans
³⁵
 enrolled at Ohio State University, Thompson and Pressey determined
 the median age of veterans at entrance into college to be 23.2. The
 pre-war entrance age median was 18.8 and graduation median age for
 pre-war students was 22.9.

These studies discovered that the veteran in college is older
 than the non-veteran. The veterans' average age is almost a college

³³ Clark Tibbetts and Woodrow W. Hunter, "Veteran and Non-Veterans at University of Michigan," School and Society, 65:347-350, May 10, 1947.

³⁴ Norman W. Garmezy and Jean M. Crose, "A Comparison of the Academic Achievement of Matched Groups of Veteran and Non-Veteran Freshmen at the University of Iowa," Journal of Educational Research, 41:547-550, March, 1948.

³⁵ R. B. Thompson and S. L. Pressey, "Analysis of the Academic Records of 2,144 Veterans," College and University, Journal of American Association of Collegiate Registrars, 23:242-252, January, 1948.

generation higher than the non-veterans' average age. The veteran students vary in age within their group more than the non-veterans vary within their group.

II MARITAL STATUS

In examining the literature on veterans the factor of marriage was found to be often mentioned. Some of the studies indicate that marriage may be one of the factors contributing to better performance in college by men who are veterans. Other studies merely take into account of the fact of marriage with no attempt at noting any significance that it might have on college performance.

36

Dean Wright at Indiana University mentioned that in the spring of 1945 fourteen per cent of the veterans were married.

37

Murphy says that in the spring of 1946 at Harvard one out of every

38

five veterans was married. Fine, on the basis of a survey of 501 colleges, reported in August, 1946, estimated that thirty per cent of

39

the veterans in college were married. Welborn found 33.3 per cent

36 Wendell W. Wright, "Data on Veterans now Enrolled in Indiana University," School and Society, 61:245-256, April 26, 1945.

37 Charles J. V. Murphy, "G. I's at Harvard," Life Magazine, XX-24:18, June 17, 1946.

38 Benjamin Fine, "Boom in Education," Pic, The Magazine for Young Men, 18:29, August, 1946.

39 Ernest L. Welborn, "Scholarship of Veterans Attending a Teachers College," Journal of Educational Research, 40-3:209-214, November, 1946.

of veterans and 7.7 per cent of non-veterans were married among 109 veterans and ninety-two civilians attending a teachers college in the winter quarter of 1945 and 1946. He thinks there is little relation between marital status and gains made in academic rating by veterans who returned to school.

40

Taylor assumes that marriage may have been one of the factors contributing to the success of veterans as students in an English class at the University of Southern California at the end of the winter term of 1946. Tibbetts and Hunter,⁴¹ because of the number of married students at the University of Michigan from the summer term of 1944 through the fall term of 1946, suggests that someone should make a study on the relationship between marital status and academic performance.

The following studies do more than just record the fact of marriage. They studied its possible effect on college grades.

42

Riemer reported on an investigation carried out by Paul R. Trump, Advisor of Men at the University of Wisconsin. This study found 1,021 married veterans to have a grade point average of 1.798 and 3,180 unmarried veterans to have a grade point average of 1.616. Married veterans with children, 63 of them, had a grade point average

⁴⁰ Edgar A. Taylor, "How Well are Veterans Doing?" School and Society, 65:210-213, March 22, 1947.

⁴¹ Clark Tibbetts and Woodrow W. Hunter, "Veterans and Non-Veterans at University of Michigan," School and Society, 65:347-350, May 10, 1947.

⁴² Svend Riemer, "Married Veterans are Good Students," Marriage and Family Living, IX-1:11-12, February, 1947.

of 1.901. Riemer suggests that the difference may be due to various factors such as age, maturity as separate from mere chronological age, different set of motivations, and the strain of courtship on the unmarried person.

43

Epler, on the basis of a comparison of grade point ratios of fifty married veterans with fifty single veterans, remarks, "that having a wife and in many cases children, stimulates the veteran to do better work." The married veteran had a grade point ratio of 2.62. The single veterans had a grade point average of 2.54 for the year 1945 and 1946.

44

In a brief report Orr records a grade point average of 2.49 for married veterans. Single veterans had a grade point average of 2.35. He used a random sample of 264 for each.

45

Thompson and Pressey studied 1,584 single veterans, 444 married veterans, and 149 married veterans with children. He found grade point averages of 2.48, 2.69, and 2.72 respectively.

These studies on marriage reveal that more veterans than non-veterans are married. Marriage may be one of the factors contributing to the greater academic achievement of veterans. In fact these

43 S. E. Epler, "Do Veterans Make Better Grades than Non-Veterans?" School and Society, 66:270, October 4, 1947.

44 M. G. Orr, "Grade Point Averages of Veterans at Oklahoma Agricultural and Mechanical College," School and Society, 66:94, August 2, 1947.

45 R. B. Thompson and S. L. Pressey, "Analysis of the Academic Records of 2,144 Veterans," College and University, Journal of American Association of Collegiate Registrars, 23:242-252, January, 1948.

studies indicate that married veterans do better than single veterans, and married veterans with children do even better than married veterans without children.

III ACADEMIC ACHIEVEMENT

Most of the statistical studies mention academic achievement. Some do this without any attempt to compare the veterans with any other groups or groups. Such studies will be listed first, followed by comparative studies.

Veterans at Indiana University according to Dean Wright⁴⁶ averaged seven per cent higher than classmates on same level in 1945. Murphy⁴⁷ said less than one veteran in one hundred flunked at Harvard in the 1945 and 1946 school year. Anderson⁴⁸ said that the veteran was doing well at Pasadena Junior College in 1945. He gave a case study of one veteran who was a C student with, D's in his record ten years before. Now, at twenty-eight and on crutches, he made five A's and one B. Love and Love⁴⁹ studied the performance of eighty veterans, non-high school graduates, at Ohio State University. The

⁴⁶ Wendell W. Wright, "Data on Veterans now Enrolled in Indiana University," School and Society, 61:245-246, April 26, 1945.

⁴⁷ Charles J. V. Murphy, "G. I's at Harvard," Life Magazine, XX-24:19, June 17, 1946.

⁴⁸ John A. Anderson, "Veterans in a Four Year Junior College," Journal of American Association of Collegiate Registrars, XXI-2:205-210, January, 1946.

⁴⁹ L. S. Love and L. E. Love, "Performance of Veterans," Journal of Higher Education, 18:95-98, February, 1947.

took the test of General Educational Development. Seventy-three were matriculated on the basis of ranking in the fortieth percentile or above on all but the Expression Test. These seventy-three performed much as high school graduates. Thirty-five completed two quarters of work, of these, twenty-two showed an average point hour ratio increase of 0.26 over the first semester marks. Six were dismissed for poor scholarship and five because of absence at the end of the first quarter.

IV COMPARISONS OF VETERANS AND NON-VETERANS

50

Stewart and Davis carried on one of the earliest and most interesting statistical studies. This study was on the scholarship of 251 veterans who were students under the auspices of the Federal Bureau for Vocational Rehabilitation at the University of Colorado from 1919 to 1926. These men were compared with 263 non-veterans selected at random from the departments according to the number of veterans in that department. Numerical values were assigned to grades. Veterans had a grade average of 77.9 with a standard deviation of 8.9. Non-veterans had a grade average of 78.7 and a standard deviation of 7.40. The difference in the means was .80 with a standard error of the difference in the means of 11.61. The critical ratio was .07. The authors concluded that the veteran was not any better or any worse than his fellow students.

50 Elizabeth D. Stewart and Robert A. Davis, "Scholarship of World War I Veterans who Studied at the University of Colorado from 1919 to 1926," Journal of Educational Psychology, 37:53-57, January, 1947.

One hundred and four veterans were compared with a like number
 51
 of non-veterans by Love and Hutchison. Fifty-one were paired by
 academic program and within five points of each other on the Ohio
 State Psychological Examination. The average for the group of
 veterans on the Ohio State Psychological Examination was 49.53 and for
 non-veterans 50.05. The veterans average point hour ratio was 2.45:
 non-veterans 2.31. The difference was .14 which is not statistically
 significant. The non-veteran members of the pairs were mostly women.
 Men pairs might have shown a greater difference.

52
 Welborn at Indiana State Teachers College, Terre Haute,
 Indiana, compared one hundred-nine veterans with ninety-two civilians.
 The subjects were much alike except for average age difference of 3.5
 years and marriage. The mean percentile on American Council
 Examination for veterans was 53.6 and for civilians was 49.0. The
 average scholarship index, grade points divided by total hours attempted,
 for civilians and veterans was figured. For all the college veterans
 the average was 62; for non-veterans was 58.3. The difference of 3.8
 showed a superiority for veterans of about the same as the percentile
 difference on the American Council Examination.

53
 Kvaraceus and Baker in a class in Educational Measurements,

51 L. I. Love and C. A. Hutchison, "Academic Progress of
 Veterans," Educational Research Bulletin, 25:223-226, November, 1946.

52 Ernest L. Welborn, "Scholarship of Veterans Attending a
 Teachers College," Journal of Educational Research, 40-3:209-214,
 November, 1946.

53 W. C. Kvaraceus and J. F. Baker, "Achievement of Veterans
 and Non-Veterans in One Required Course at Boston University," School
 and Society, 64:384-385, November 30, 1946.

with no constants except the instructor, technique, and the same test, found that eighty-nine veterans in the graduate school had a mean score on the Educational Measurement Test of 185.2 with a standard deviation of 17.8, and forty non-veterans had a score on the test of 183.0, standard deviation 17.1. The critical ratio was .699. Twenty-eight undergraduate veterans in the same classes had a mean average score of 173.9, on the same test and a standard deviation of 24.1; non-veterans had a mean average score on this test of 165, standard deviation 21.2. The critical ratio was 1.811. Hamilton in a survey of veterans' success in ten colleges was told that at the University of Wisconsin, 6.5 per cent of the veterans failed or withdrew in the fall of 1945 and that 6.8 per cent of non-veterans failed or withdrew. In the spring of 1946, withdrawals and failures were 5.2 per cent for veterans and 8.3 per cent for non-veterans.

54

Thompson and Flesher in an introductory study at Ohio University found a difference of .15 between average point hour ratio of veterans and non-veterans. Veterans were one-eighth of a letter grade superior. A future study by the same investigators proposes to compare ages, difference in ability, previous academic record of

55

veterans returning to college. Riemer reports a grade point average

54 Horace E. Hamilton, "How Good is our G. I. Student," Educational Forum, 11:180-181, April, 1947.

55 R. B. Thompson and Marie Flesher, "Comparative Academic Records of Veterans and Civilian Students," American Association of College Registrars, 22:176-179, January, 1947.

56 Svend Riemer, "Married Veterans are Good Students," Marriage and Family Living, IX-1:11-12, February, 1947.

of 1.66 for veterans and 1.5 for non-veterans at the University of
 57 Wisconsin. Taylor in an English class found more veterans receiving
 A's than non-veterans.

58
 At the University of Michigan, Tibbetts and Hunter discovered
 that in the six colleges 857 veterans had a grade point ratio of 2.56
 59 and 846 non-veterans a grade point ratio of 2.55. Orr at Oklahoma
 Agricultural and Mechanical College found a grade point average for
 60 veterans of 2.53 and for non-veterans 2.42. Epler reported on one
 hundred veterans and 64 non-veterans in an unmatched study for the
 year of 1946 and 1947. Veterans had an average grade point ratio of
 2.58 and non-veterans a grade point ratio of 2.47.

61
 Thompson and Pressey using fifty-six veterans and 55 non-
 veterans found a median point hour ratio of 2.16 for veterans and one
 of 1.90 for non-veterans. The median percentile of ability to succeed
 in college, as judged by high school records, was thirty for veterans
 and thirty-five for non-veterans. Forty-five per cent of the veterans

57 Edgar A. Taylor, "How Well are Veterans Doing?" School and Society, 65:210-213, March 22, 1947.

58 Clark Tibbetts and Woodrow W. Hunter, "Veterans and Non-Veterans at University of Michigan," School and Society, 65:347-350, May 10, 1947.

59 M. G. Orr, "Grade Point Averages of Veterans at Oklahoma Agricultural and Mechanical College," School and Society, 66:94, August 2, 1947.

60 S. E. Epler, "Do Veterans Make Better Grades than Non-Veterans?" School and Society, 66:270, October 4, 1947.

61 R. B. Thompson and S. L. Pressey, "Analysis of the Academic Records of 2,144 Veterans," College and University, Journal of American Association of Collegiate Registrars, 23:242-252, January, 1948.

were still enrolled in the spring of 1947 and twenty-four per cent of the non-veterans.

62

Garmezy and Crose matched 245 veterans with a like number of non-veterans as to sex, marital status, race, and college aptitudes measured by Tests of General Educational Development. The effect of age upon achievement was studied by running a correlation between grade point averages and age. This correlation was .00. The grade point averages of ninety-nine veterans born in 1927 and 1928 were compared with the grade point averages of seventy veterans born in 1922 and 1923. The grade point average for the first group was 2.20 and for the second group was 2.05. The critical ratio was 1.36 which was not significant statistically. The younger veteran had a slight advantage.

This study did not consider veterans or non-veterans who failed to finish the school year. It was found that veterans had a mean grade point average of 2.19 with a standard deviation of .68. The non-veterans had a mean grade point average of 2.09 and a standard deviation of .68. The difference between the means was .10 which represented a slight superiority for veteran students.

The findings of these investigations indicate that the veteran performs better than non-veterans in academic work. The differences are not great but are consistent. Enough to allow for the conclusion that some factor or factors in the veterans make-up is conducive to higher achievement in college work.

62 Norman Garmezy and Jean Crose, "Comparison of the Academic Achievement of Match Groups of Veteran and Non-Veterans Freshmen at the University of Iowa," Journal of Educational Research, 41:547-550, March, 1948.

V COMPARISON OF VETERANS PAST ACHIEVEMENT WITH PRESENT ACHIEVEMENT

Many of the veterans in colleges today are re-entered students. These studies were designed to show the difference in scholarship between the past record of these veterans and the present record.

63

Welborn studied the records of 107 veterans who attended Indiana State Teachers College prior to their entry into service. He established a scholarship index on 107 veterans who had attended the Indiana State Teachers College prior to their entry into service. His scholarship index is based on an A grade equaling one hundred with twenty-five points to a letter grade. The pre-service scholarship index average was 52.3 and the post-service scholarship index was 66.5, a gain of 14.2. He then established a frequency table on the gains and losses in scholarship index. Next he studied the number of mean gains or losses according to size of the pre-war index and their mean changes. This study revealed that the gains were in inverse ratio to the size of the pre-war index but little relationship of gains and the American Council Examination, age, marital status, college classification, and class load was found. The kind of courses had some influence.

The pre-service records of 219 veterans at Ohio State University were compared with their post-service records by Love and Hutchison.

64

63 Ernest L. Welborn, "Scholarship of Veterans Attending a Teachers College," Journal of Educational Research, 40-3:209-214, November, 1946.

64 L. S. Love and L. E. Love, "Performance of Veterans," Journal of Higher Education, 18:95-98, February, 1947.

Gains were figured on each pre-war point hour ratio interval. The intervals ranged from 1.00-1.49 to 3.00-4.00. The study found the greatest gain in the lowest interval. Nine point nine per cent of the veterans do less well with an average loss of .27 of a point hour ratio.

65

A brief note from Day reports the veterans at Cornell University who returned, as averaging a grade of seventy-eight against a pre-war grade average of 71.5. Veterans who had academic difficulty before service have improved averages from sixty-four to 75.3.

66

Thompson and Pressey, in a study of 1,035 former students returned, found a pre-service average point hour ratio of 2.03 and a post-service average of 2.66. Ten per cent before the war had B's or better, thirty-three per cent since the war. Thirty-four per cent lacked the 1.8 average point hour ratio required for graduation before the war and only twelve per cent lacked that average since returning from service.

In these studies on the comparison of pre-war records with post-war records it was generally found that the veteran makes higher marks now than he did before the service. The greatest amount of improvement is among that group of veterans who had the lowest ratings before the service.

65 Edmond E. Day, "Academic Achievement of Veterans at Cornell," School and Society, 65:101, February 8, 1947.

66 Thompson and Pressey, loc. cit.

VI COMPARISON OF VETERANS ACHIEVEMENT THE FIRST GRADE PERIOD WITH THE SECOND GRADE PERIOD

67

Love and Love⁶⁷ report on thirty-five veterans completing two quarters of study. Twenty-two made an average point hour ratio gain of 0.26 in the second quarter over the first quarter. Thirteen did less well. This was the same study reported on page 21. It was noted by⁶⁸ Epler that veterans had an average grade point ratio of 2.47 in the fall term of 1946 and 1947, and a grade point ratio of 2.57 in the winter term. The spring term gave an average of 2.69. Non-veterans show a loss of .02 in the winter and the same average for spring term as for the fall term.

There was a small gain shown in average grade point ratio of veterans in the second semester over the average grade point ratio of the first semester in both of these studies.

VII MISCELLANEOUS SPECIAL AND PROPOSED STUDIES

A number of the above studies considered factors and characteristics which were not recorded in the reviews. Because they may be of interest to persons making a study of veterans some of them are here recorded. Many of the studies reported on numbers, percentages, and grade averages by class levels. Some recorded length, branch, and rank of service. A few considered the type of discharge

⁶⁷ Love and Love, loc. cit.

⁶⁸ Epler, loc. cit.

and the status of the veteran in terms of whether he was under Public Law 16 or Public Law 346. Major fields, courses, and choice of occupation received notice by a limited number of studies.

One special study is thought to be worth more than passing
69
notice. Stewart made a follow-up study of rehabilitation of veterans at the University of Colorado from 1919 to 1926. The post-war achievement of these men, 425 in all, in terms of income, civic activities, honors, children, and service in World War II was checked by questionnaire. The results were highly gratifying. Rehabilitation paid the college, the veteran, and the country as a whole.

Several of the studies reviewed were merely preliminary or trial studies. The authors outlined further proposed research. One proposed study which should answer many of the questions raised is on
70
the Carnegie Study of Results of Veterans Educational Programs. This study will collect data from achievement tests, questionnaires, college records, and interviews. It will attempt to answer the following questions:

Do veterans in general make better students than non-veterans? How do factors like age, nature of military experience, and marital status relate to quality of academic work? What types succeed best and why? 71

69 Elizabeth D. Stewart, "Post-College Achievement of Veterans of World War I Enrolled in the University of Colorado," School Review, 54:593-597, December, 1946.

70 "Carnegie Study of Results of Veteran Educational Program," School and Society, 65:221-222, March 29, 1947.

71 Ibid., p. 22.

The Carnegie investigation also will determine the affect of Public Law 346 in removing economic obstructions to college education by comparing the performance of veterans who would have gone to school without government aid with the performance of those who could not have gone without such aid. The effect of interruption of college education by war will also be studied.

CHAPTER III

COLLECTION AND TREATMENT OF DATA

In collecting the data for this study three sources were used as outlined in Chapter I. A preliminary survey suggested that sufficient data would be readily available during the summer of 1946. The information from this survey, however, proved partially false, and all data were not completed until the summer of 1948.

Source of data. The initial list of veterans, as defined in Chapter I page 6, was obtained from the Office of the Veteran's Advisor. In addition to the names of the veterans enrolled at the College of William and Mary information was obtained from this office on marital status as revealed by subsistence payments, on the Public Law under which the veterans were enrolled, and the grades made and subjects failed by the veterans in most cases. The reasons for withdrawals were also recorded here.

Additional information was collected from the Counseling Office. Grade point averages and ages for most of the veterans were here recorded. Certain information which is not used in this study was also obtained. This consisted of standing in high school classes, scores on the American Council on Education Psychological Examination, and scores on the Nelson-Denny Reading Test. These three criteria are usually considered useful in prediction of college success. No use is made of them in this investigation but, even though these data are not complete they might be used by some other

investigation to make a study on the reliability of these three criteria in predicting college achievement of veterans. They also would be useful in a study on achievement of veterans and non-veterans where the groups are matched on ability to achieve in the college as predicted by these three criteria.

The data from the above sources were supplemented wherever they were incomplete by records obtained in the Office of the Registrar of the college. Grades were obtained from this source on all former students who spent at least a semester at the College of William and Mary prior to their entry into service. These grades were converted to the quality point system in use in the Counseling Office which is explained in Chapter I, definitions of terms, page 6.

Recording the data. A master sheet was prepared upon which all of the above mentioned data were recorded. When classification of the data was begun the difficulty of handling such sheets was discovered. As a result the data which were used in the study were abstracted on to five by eight cards for ease in sorting. To facilitate copying the data in as short a time as possible a mask was devised so that only the essential facts need be recorded. This mask device appears in the Appendix.

Classification of the data. The total group of veterans at the College of William and Mary was analyzed and classified for the purpose of this study. All records of graduate students, Bachelor of Civil Law, and veterans holding degrees from other colleges were eliminated and do not appear in this study, save in the descriptive

study of the total veteran group.

Those veterans who dropped out of college before completing a semester of work are considered in the descriptive study but could not be measured for academic achievement where grades had not been assigned.

For the descriptive study the veterans were divided into class groups and arranged for further studies on age and quality point average.

Analyzing the data further revealed that there were enough former students who had been in the College of William and Mary prior to service to warrant an investigation of their achievement both before and after service.

A small group of veterans was found to have been in college both the first and second semester of 1945 and 1946. These were sorted out for a study on the relative achievement after a semester period to adjust to the college atmosphere.

The final group separated from the total group of veterans were those who were married. This group was compared with the unmarried veterans in the college the second semester.

Treatment of the data. The data were assembled as explained in the preceding section. The following four studies will reveal the treatment given to the whole of the data and its separate parts.

I-DESCRIPTIVE STATISTICS ON VETERANS AT THE COLLEGE OF
WILLIAM AND MARY 1945-1946

There were enrolled at the college during the session, 1945 and 1946, two hundred and sixty-eight male veterans. Of these six were enrolled as students for the degree of Bachelor of Civil Laws, four were found to be graduates of other institutions, two were working toward a Master of Arts degree. Two had been in school most of the time during the war. All these, together with one student who entered early in 1944 were not considered typical of veteran students. None of these men appear in any of the following studies.¹

Removing the records of the above mentioned fifteen men left a total of 253 men veterans upon which the first part of this study is based. The first factor taken into account was that of age.

Age. The ages of veterans in the college ranged from nineteen to thirty-three years. Table I on the following page gives the results of the findings regarding the age of veterans at the College of William and Mary as of June, 1946. The age in years of the veterans was calculated by subtracting the month and year of birth from the sixth month of 1946. A recorded age of twenty means a veteran was between nineteen years and six months of age and twenty years and six months of age as of June 1, 1946. The difference between the average

¹ The total registration of all students for the session 1945 and 1946 was 1,373 including withdrawals. There were 1,096 students enrolled the first semester and 1,273 the second semester of 1945 and 1946. This information is from the records of the Office of the Registrar, College of William and Mary.

TABLE I

AVERAGE AGE OF VETERANS BY CLASS AT COLLEGE OF
WILLIAM AND MARY 1945-1946 AS OF JUNE FIRST 1946

Class	Number	Average age
Freshman	144	23.2
Sophomores	55	23.3
Junior	30	24.8
Seniors	19	25.2
Unclassified	5	23.0
Total	253	23.5

age of freshmen veterans and senior veterans is only two years. The veteran proves to be more than a college generation older than the usual entering student and, is older than the typical graduating student.²

² Daniel D. Feder, "Colleges and Universities VIII, Student Personnel Work-2. Student Population Statistics, Age," Encyclopaedia of Educational Research, 1941, pp. 254.

"The typical scholastic life begins at six and, with normal progression, brings the freshman to college at eighteen. (12) In a sampling of 6,434 men and women in colleges of arts and sciences in twenty-two universities widely scattered throughout the United States, 35.4 per cent entered college in their eighteenth year. (12) A total of 38.3 per cent were below this age at entrance, and 26.3 per cent were above it The typical graduate has spent four years in college and is about twenty-two years old." (12) refers to J. H. McNeely, "College Entrance Ages," School and Life, 23:44, 1937.

TABLE II

QUALITY POINT AVERAGES OF VETERANS BY CLASS IN THE COLLEGE
OF WILLIAM AND MARY SECOND SEMESTER 1945-1946

Class	Number	Mean quality point average	Standard Deviation
Freshman	134	.87	.83
Sophomores	53	1.03	.76
Juniors	30	1.53	.54
Seniors	17	1.65	.61
Unclassified	3	2.01	.53
Total	237	1.06	.82

Quality point averages. Table II presents the picture of the achievement of veterans in the college classes as of the end of the second semester of 1946. There are only 237 veterans considered in this portion of the study due to the fact that of the 253 listed in the Age ^{Table} Table I, two veterans were graduated in February, 1946, and fourteen withdrew, for reasons explained later, before the grading period had ended. The grades of those veterans who completed the semester, even though failing and later removed for academic deficiency, are reflected in the total picture presented by Table II. This table gives the usual increase revealed in college marks from Freshmen to Senior Classes with the corresponding increase in the homogeneity of the group as measured by standard deviations of the quality point average distributions.

The quality point system used for this table is that defined in Chapter I where a grade of A equals three, B equals two, C equals one, D equals zero, and F equals minus one quality points for each hour of work attempted. It is not directly comparable to the system in use in the registrar's office unless one takes into account the number of credit hours failed.³

Failures and withdrawals. Evidence of failure among veterans is presented in Tables III and IV. Table III on the following page is based on the records in the Office of Veteran's Advisor as of August, 1946. This table does not take into account separate course numbers but has the failures under subject headings.

The greater number of failures the second semester is natural as the number of veterans enrolled was much greater the second semester than the first. Most of these failures are concentrated among those few veterans who were forced to withdraw because of academic deficiencies.

Veterans fail single subjects among the first four on Table IV. Individual case studies might reveal the reasons for these failures. This study does not purport to attempt such establishing of causal relationships.

Nearly ten per cent of the total veteran enrollment failed in History the second semester. Nearly ten per cent of freshmen were

³ The records of the Registrar's Office at the College of William and Mary show a quality point average for men students for the session 1945 and 1946 of 1.09. These records are based on the F marks receiving zero credit and zero quality points.

TABLE III

SUBJECTS FAILED BY VETERANS IN SESSION 1945-1946

Subjects Failed	Freshman Semester		Sophomores Semester		Juniors Semester		Total by subjects Session
	1	2	1	2	1	2	
History	1	20	1	2	1	0	25
Mathematics	0	14	1	2	1	1	19
Spanish	2	15	0	0	0	2	19
English	3	9	1	3	0	0	16
Biology	3	4	0	0	0	0	7
Economics	1	2	1	3	0	0	7
Physical Education	1	3	1	1	0	0	6
French	0	3	2	0	0	0	5
Chemistry	2	0	0	1	0	0	3
Constitutional Law	0	0	0	2	0	0	2
Government	0	2	0	0	0	0	2
Physics	0	0	0	2	0	0	2
Business	0	1	0	0	0	0	1
Fine Arts	0	1	0	0	0	0	1
Latin	0	1	0	0	0	0	1
Philosophy	0	0	1	0	0	0	1
Total *	13	75	5	18	3	3	117

* No veterans who were Seniors failed.

failed in Mathematics and a like per cent in Spanish in the same semester. English was failed by six per cent of the freshmen the second semester. These four subjects were the most commonly failed. Such subjects are usually part of the basic requirements of the freshman year.

TABLE IV

REASON AND NUMBER OF VETERAN WITHDRAWALS FROM
COLLEGE OF WILLIAM AND MARY SESSION 1945-1946

Reason	First semester Number	Second semester Number
Academic deficiency	1	9
Violation of honor code	0	4
Withdrew to work	0	3
Accidents and illness	0	3
Inability to settle down	0	2
Discipline committee	0	1
Apprentice school	0	1
Returned to service	0	1
Excessive absence	0	1
Total	1	25

Table IV reveals the inability of some veterans to adjust to college life. About ten per cent of the veterans who entered withdrew

from college. Only four per cent of the withdrawals were due to academic deficiency.

The reasons given for withdrawals are not always a true picture. There may be causes where there are several reasons or where there are reasons which are hidden. The statements on Table IV are the reasons as they appeared on the college records. Case studies might reveal the validity of these reasons.

II-COMPARISON OF VETERANS PRE-SERVICE COLLEGE ACHIEVEMENT WITH POST-SERVICE ACHIEVEMENT

Analysis of the data reveals that there were enough students who had attended the College of William and Mary prior to service to warrant a comparison of their achievement prior to service with their present achievement as of the second semester of 1946. Table V on the following page gives the results of this study.

From this table it is evident that there is considerable gain in the mean quality point average in the semester after service over the semester prior to service. The freshmen group show the greatest gain of 1.25 quality points. This group must have been the most unsettled of all the class groups judging from the pre-service average of -0.20 quality points. Freshmen showed the greatest variability within their group prior to service, but became more compact in variation after service. All the groups follow these trends; i. e. show a gain in mean quality point average and become more homogeneous.

The total group follow these same trends. The critical ratio

TABLE V

COMPARISON OF VETERAN STUDENTS QUALITY GRADE POINT AVERAGES
LAST FULL SEMESTER PRIOR TO SERVICE WITH THE FIRST FULL
SEMESTER AFTER SERVICE

Class	Number	Semester prior to service		First semester after service		Difference between means
		Mean quality point average	Standard deviation	Mean quality point average	Standard deviation	
Fresh.	16	-0.20	0.83	1.05	0.67	1.25
Soph.	36	0.14	0.79	1.10	0.71	.96
Jr.	18	0.79	0.77	1.53	0.61	.74
Sr.	17	1.20	0.66	1.69	0.60	.49
Total	87	0.42	0.92	1.30	0.70	.88 *

* The critical ratio between the means of the total group was 7.33.

of the difference between means of the total group, 7.33 is highly significant.⁴ A critical ratio of 2.638 would indicate with ninety degrees of freedom that such a difference would occur only once in a hundred times by chance. Since the obtained ratio is so much larger, 7.33 for eighty-seven cases, it follows that the difference in the means is highly significant and likely did not occur by chance.

⁴ Allen L. Edwards, Statistical Analysis for Students of Psychology and Education, (New York: Rinehart and Company, Inc., 1946). Table C, p. 330.

III-COMPARISON OF VETERANS' ACHIEVEMENT THE FIRST GRADE
PERIOD WITH ACHIEVEMENT THE SECOND GRADE PERIOD

A small group of veterans attended college both the first and second semester after service. Table VI reports the results of an analysis of the achievement of these veterans in the two semesters.

TABLE VI
COMPARISON OF VETERANS MEAN QUALITY POINT AVERAGES OF THE
FIRST SEMESTER, WITH THE SECOND SEMESTER
1945-1946

Group	Number	First Semester		Second Semester		Difference between means
		Mean quality point average	Standard deviation	Mean quality point average	Standard deviation	
Public Law 16	10	0.69	0.86	0.75	0.93	0.06
Public Law 346	22	0.94	0.89	0.85	0.73	-0.09
Total	32	0.86	0.89	0.82	0.79	-0.04 *

* The critical ratio between the means of the total group was 0.19.

Since there were so few of these veterans the group was not divided into classes. Instead the group was divided into sub-groups. One group was composed of all veterans in training under Public Law 16 and the other group under Public Law 346. The ten veterans in

training under Public Law 16 show a gain of 0.06 of a quality point the second semester. The twenty-two veterans under Public Law 346 show a loss of 0.09 of a quality point. This latter finding is contrary to expectations in the literature. The difference in the means quality point averages for the total group was a loss of 0.04 quality points. The critical ratio for this difference in the means is 0.19. In order for such a difference to have not occurred by chance more than five times⁵ in one hundred the critical ratio should have been 2.037. Since the obtained critical ratio is so much smaller than this we can say with confidence that such a difference may have occurred by chance.

IV-COMPARISON OF THE ACHIEVEMENT OF MARRIED AND UNMARRIED VETERANS

During the second semester of 1945 and 1946 there were in the College of William and Mary 237 veterans. Of these, forty were married and 197 were unmarried. Table VII on the following page shows the results of the statistical analysis by classes on age and quality point averages. In addition to the data presented in Table VII, significance of the difference in the means was calculated. This critical ratio proved to be 2.76. From a table of values of t , a t of 2.601 for two-hundred degrees of freedom is at the one per cent level⁶ of significance. In this case the degrees of freedom are 237 minus two, or 235.

⁵ Ibid., p. 330.

⁶ Ibid.,

TABLE VII
COMPARISON OF MEAN QUALITY POINT AVERAGES AND AGES OF MARRIED VETERANS
WITH UNMARRIED VETERANS SECOND SEMESTER 1945-1946

Class	Married				Unmarried				Difference between means	
	Number	Average age	Mean quality point average	Standard deviation	Number	Average age	Mean quality point average	Standard deviation	Average age	Quality point average
Fresh.	21	24.5	1.21	0.75	113	22.9	0.81	0.82	1.0	0.40
Soph.	7	25.1	1.18	0.88	46	23.0	1.01	0.74	2.1	0.17
Jr.	8	24.2	1.64	0.69	22	24.9	1.48	0.50	-.7	0.16
Sr.	3	26.0	1.85	0.21	14	24.4	1.61	0.65	1.6	0.24
Uncl.	1	26.0	2.50	0.00	2	22.0	1.77	0.48	4.0	0.73
Total	40	24.7	1.37	0.79	197	23.3	0.99	0.82	1.4	0.38

The above t of 2.76 indicated that there was a significant difference between the means of achievement not due to chance. In an effort to determine whether marriage might be the factor causing the difference in the means the formula for point biserial coefficient of correlation⁷ was used. This formula presupposes that one variable is a dichotomy which can not be continuous and normally distributed, as in this case. Marriage is considered the dichotomous variable. The other variable is the quality point average.

The point biserial coefficient of correlation between marriage and quality point averages was found to be .1736. On a table of r for 200 degrees of freedom an r of .138 is significant at the five per cent level and one of .181 at the one per cent level.⁸ As there were 235 degrees of freedom this is probably significant at the one per cent level.

In this chapter the collection and analysis of the data has been presented. The next and final chapter presents a discussion of the results, conclusions, and recommendations for further research.

⁷ Ibid., p. 116. This formula is, $r_{pt-bis} = \frac{(M_p - M_q)}{SD} \cdot \sqrt{pq}$

⁸ Ibid., p. 331. Table D, values of r at five per cent and one per cent levels of significance.

CHAPTER IV

DISCUSSION OF RESULTS, CONCLUSIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

It is the purpose of this chapter to discuss the results of this investigation and to interpret the findings in light of other studies recorded in Chapter II. The definite conclusions are listed and also suggestions for further research.

DISCUSSION OF RESULTS

AGE

The results of the study on ages agrees with similar studies reported in the chapter on the literature in the field. The veteran entering the College of William and Mary as a freshman is about five years older than the student who would come to college directly from a twelve-year school system. The senior veterans are about three years older than the usual graduating population.

The inference might naturally be made that any increase in veterans' marks might be due to this factor of increased age. No such inference can be proved by this study as no attempt was made to relate age to achievement. A more advanced chronological age as a factor in scholastic success was ruled out by Garnezy and Crose¹ in an attempt

¹ Norman Garnezy and Jean Crose, "Comparison of the Academic Achievement of Matched Groups of Veteran and Non-Veteran Freshmen at the University of Iowa," Journal of Educational Research, 41:547-550, March, 1948.

to match veterans and non-veterans as reported in Chapter II. It might prove interesting to run such a check on the age factor among veterans at the College of William and Mary. In Table VII the mean ages of married and unmarried veterans are recorded. The married veteran did significantly better than the single veteran in his school work. He was an average of 1.4 years older than the single veteran. In the junior class where the married veteran is seven-tenths of a year younger than the single veteran, he still makes a higher quality point average. This is in agreement with Garnezy and Crose² who found a 0.00 correlation between age and quality point average.

ACHIEVEMENT

In this study no data were collected on non-veterans to compare with scores of veterans in order to see relatively how well the veteran did in college. The results of the investigation show that most veterans do succeed in staying on in college and that many make good grades.

The academic mortality for veterans was not high. Only ten per cent of the total number of veterans in the second semester withdrew from school. Only four per cent withdrew for academic deficiency. The veterans are not all good students nor are all of them able to adjust to college life. The largest single group of withdrawals was due to academic deficiency. That ability to adjust to college is not always a matter of academic achievement is supported by the number who left

² Garnezy and Crose, loc. cit.

school for such reasons as inability to settle down, violation of honor code and so forth.

Nearly ten per cent of the total veteran enrollment had failures in the subject of History. This may be due to a large extent to the practice in that semester of giving double courses in History, and English in one semester. It may have been due to other factors such as considerable quantities of concentrated reading which some veterans were still too restless to do. MacMahon³ suggests that in some cases the instructor was too much of a specialist. Further study would have to be made before valid conclusions could be drawn. It was the purpose of this study merely to record such data.

FORMER STUDENTS RETURNED

The former students who returned to the college after the war performed much better than they had previously. This was true in every class group. The freshmen show the greatest gain in quality point averages. They had the lowest mean quality point average perhaps indicating that they were more disturbed and unstable than the other classes. All class groups and total groups become more homogenous as indicated by the smaller standard deviations after service. The gain in quality point averages is in keeping with studies reported from other colleges. Case studies would be necessary to interpret the various reasons for this change. In many instances it

³ Donald Hutchins MacMahon, "Vets into Students," School and Society, 64:204-206, September 21, 1946.

perhaps is not so much a case of doing excellent after the war but a matter of having done very poorly before entry into the service. This may have been due to the strain of waiting, or excitement over going, plus the uncertainty of everything for young men in time of war.

That the returned students do better is well supported by the fact that the critical ratio of 7.33 is so high. A t of 2.632 would have been significant at the one per cent level for ninety degrees of freedom; therefore, that a " t " of 7.35 is the result of chance would be exceedingly improbable.

COMPARISON OF FIRST GRADE PERIOD WITH SECOND

The common assumption concerning veterans attending school two semesters in succession after service is that they would do better the second semester than they did the first. The first period would serve as an adjustment time.

This assumption does not prove true in the study of thirty-two undergraduate veterans in attendance both the first and second semesters of 1945 and 1946. The results may have been influenced to a slight degree by the fact that one veteran was forced to leave school late in May because of illness. His grades were probably affected. Another of these veterans finished the second semester but was forced to withdraw because of academic deficiency. Both these students' grades are included in the study. A slight gain in quality point average was noticed in the Freshmen and Junior classes but this was over weighed by loss in the other class groups so that the total

veteran group show a loss of 0.04 of a quality point.

The Public Law 16 veterans show a slight gain in quality point average; for Public Law 346 veterans there was a loss of 0.09 quality points. The total group show a loss. None of the differences in the means is statistically significant and could well have occurred by chance.

ACHIEVEMENT OF MARRIED AND UNMARRIED VETERANS

The married veterans do better than unmarried veterans in college work. This has been the finding in most of the studies reported. The same results hold at the College of William and Mary. The married veterans show a higher mean of achievement in all the classes at the college. The mean difference between the total married group and the total group of single veterans was .38 of a quality point.

The difference between means was found to be significant at less than the one per cent level. It is very unlikely that the difference is due to chance. Since such a difference could have occurred by chance less than one time in one hundred, it can be assumed with confidence that other factors than chance were operating to create the difference.

In order to determine statistically if marriage could be an important factor in the creating of the difference a point biserial correlation coefficient was calculated. The formula for point biserial r is given in Chapter III, page 46, footnote 7.

By calculation of the point biserial r it was assumed that a definite relationship existed between grade point averages and marriage. The calculated r of .174 is significant at the one per cent level.

This means that such a relationship between grades and marriage would occur by chance only once in one hundred times. Since the statistical relationship was calculated on the basis of a dichotomy, either married or not married, the conclusion may be drawn that marriage, or factors accompanying this state, contribute to the scholarship of veterans.

This may have implications in the future in relation to personnel problems at colleges and universities. It has long been a social problem that professional people who spend long years at colleges and professional schools do not marry early and as a result do not have as many children as groups with less intelligence. When two students at a college married it was usual for both sets of parents to cut off support from their children thus forcing them out of school and into a job. It may be well if marriage proves to help a student in his studies, for parents to continue to subsidize the education after marriage as before marriage.

The difference in the grades of married students and unmarried students may be due to many factors. ⁴ Riemer suggested the strain of courtship as one factor; its removal, therefore, may tend to improve

⁴ Svend Riemer, "Married Veterans are Good Students," Marriage and Family Living, IX-1:11-12, February, 1947.

scholastic achievement. Age is mentioned by several studies but it is doubtful if this is an important factor. Increased motivation and a sense of responsibility have also been considered. The age-old word⁵ of "helpmeet" may answer the question in many cases. A number of the veterans wives already possess degrees and the know-how of studying. Many have skills such as typing which they use to good advantage in their husbands term papers and theses. Only a study using questionnaires, interviews, or case records would reveal how much these suggested factors have to do with the superior scholarship of married veterans. The fact of such superiority has been definitely shown by this study and other studies reported in the literature.

CONCLUSIONS

1. The veteran at the College of William and Mary is about a college generation older than the typical college student attending colleges and universities prior to the war.

2. A small percentage of the veterans withdrew because of academic deficiency. Most are doing good enough work to remain in college.

3. The veteran who was a student at the College of William and Mary prior to entry into service is doing better work in college since his return.

⁵ The Holy Bible, New York: American Bible Society, 1913, Genesis II, 18. p. 7. "And the Lord God said, It is not good that man should be alone; I will make him a help meet for him."

4. Veterans did slightly poorer work the second semester in school than they did in the first semester in school after service.

5. Married veterans make significantly better grades than do unmarried veterans.

SUGGESTIONS FOR FURTHER RESEARCH

Since this investigation was undertaken so many veterans have entered the College of William and Mary that more extended studies are now possible.

A study matching veterans and non-veterans on such variables as socio-economic status, prediction for college success from scores on American Council on Education Psychological Examination, Nelson-Denny Reading Test, and high school rank would help to answer the question as to whether or not veterans in general make better students than non-veterans.

The study on performance of veterans the second semester after entry as compared with the first semester could well be repeated using those veterans who entered in the spring of 1946, especially since the conclusions on this study were not significant statistically.

BIBLIOGRAPHY

BIBLIOGRAPHY

- "Adjustment of College Work to Veterans Needs in New York State," School and Society, 59:358, May 20, 1944.
- Anderson, John A., "Veterans in a Four Year Junior College," Journal of American Association of Collegiate Registrars, XXI-2:205-210, January, 1946.
- Andrews, John N., "Veteran Goes to College," Survey Graphic, 34:402-406, October, 1945.
- Arnster, A. W., "G. I's are Good Students," Business Education World, 28:214, December, 1947.
- Bagely, William Chandler, "Three Quarters of a Million Veterans Will be in Universities and Colleges Next Fall or Will They?" School and Society, 63:237, April 6, 1947.
- Bedford, James Hiram, The Veteran and His Future Job. Occupational Relations Services. Los Angeles: Society for Occupational Research, Ltd., 1946. 263 pp.
- Bolte, Charles Guy, The New Veteran. New York: Reynal and Hitchcock Company, 1945. 212 pp.
- Brown, Francis J., "Veterans Are Persons," The Educational Record, XXVI-4:321-328, October, 1945.
- "Carnegie Study of Results of Veteran Educational Program," School and Society, 65:221-222, March 29, 1947.
- "College Pattern," Newsweek, 29:93, April 14, 1947.
- Day, Edmond E., "Academic Achievement of Veterans at Cornell," School and Society, 65:101, February 8, 1947.
- Detchen, L., "Accrediting the Educational Experience at the College Level," American Association of Collegiate Registrars Journal, 21:371-379, April, 1946.
- Edwards, Allen L., Statistical Analysis for Students of Psychology and Education, New York: Rinehart and Company, Inc., 1946. 360 pp.
- Elliott, E. B., "Education of the Veterans now a Reality in Michigan," School and Society, 61:158-159, March 10, 1945.

- Epler, S. E., "Do Veterans Make Better Grades than Non-Veterans?" School and Society, 66:270, October 4, 1947.
- Feder, David D., Encyclopaedia of Educational Research, (2) Student Population Statistics. New York: Macmillan Company, 1941. 1344 pp.
- Fine, Benjamin, "Boom in Education," Pic, The Magazine for Young Men, 18:26-27, August, 1946.
- "G. I. Student is Good," Newsweek, 23:82, July 8, 1946.
- Garmezy, Norman W. and Crose, Jean M., "Comparison of the Academic Achievement of Matched Group of Veteran and Non-Veteran Freshmen at the University of Iowa," Journal of Educational Research, 41:547-550, March, 1948.
- Goetsch, W. R., "Veteran Returns to College," American Association of College Registrars Journal, 21:359-365, April, 1946.
- Hadley, Loren S., "Scholastic Adjustment Problem of the Returning Veteran," Educational Research Bulletin, XXIV-4:87-89, 112, April 18, 1945.
- _____, "To What Extent will Colleges Adjust to the Needs of Veterans?" School and Society, 63:323-325, May 4, 1946.
- Hamilton, Horace E., "How Good is our G. I. Student?" Educational Forum (Summary) Social Studies, 11:213-222, 38:180-181, January and April, 1947.
- Hines, Frank T., "Veterans and Universities," Journal of American Association of College Registrars, 20:175-183, January, 1945.
- Holy Bible, The. New York: American Bible Society, 1913. 316 pp.
- Howenstine, Emmanuel Jay, The Economics of Demobilization. Washington: American Council on Public Affairs, 1944. 336 pp.
- Justice, Thurman G., "What Happens to the Veteran in College," Journal of Higher Education, 17:185-188, April, 1946.
- Kinzer, John R., "Veteran and Academic Adjustment," Educational Research Bulletin, 25:8-12, January, 1946.
- Kipling, Rudyard, Rudyard Kipling's Verse, "The Scholars" (1919). New York: Doubleday Doran and Company, Inc., 1942. 852 pp.

- Kvaraceus, W. C. and Baker, J. F., "Achievement of Veterans and Non-Veterans in One Required Course at Boston University," School and Society, 64:384-385, November 30, 1946.
- Layton, Elizabeth N., "Academic Achievement of Veterans in Colleges," Higher Education, 4:45-47, October 15, 1947.
- Learned, W. S., "Graduate Record Examination and Returning Service Personnel," "Carnegie Foundation for Advancement of Teaching," Report 39th Annual, 39:25-36, 1943 and 1944.
- Love, L. L. and Hutchison, C. A., "Academic Progress of Veterans," Educational Research Bulletin, 25:223-226, November, 1946.
- Love, L. L. and Love, L. E., "Performance of Veterans," Journal of Higher Education, 18:95-98, February, 1947.
- MacMahon, Donald Hutchins, "Vets into Students," School and Society, 64:204-206, September 21, 1946.
- McDonagh, Edward C., "Veterans Challenge Higher Education," Journal of Higher Education, 18:149-152, March, 1947.
- Manual of the Privileges, Rights, and Benefits, to Members of the Armed Forces. Senate of the United States Congress. Washington, D. C.: United States Printing Office, 1944. 221 pp.
- Miner, Robert J., "How Fares the Veteran," American Association of College Registrars Journal, 22:159-163, January, 1947.
- Murphy, Charles J. V., "G. I's at Harvard," Life, XX-24:16-22, June 17, 1946.
- Orr, M. G., "Grade Point Averages of Veterans at Oklahoma Agricultural and Mechanical College," School and Society, 66:94, August 2, 1947.
- Pearson, G., "Veteran Versus the Professor," School and Society, 62:131-133, September 1, 1945.
- Putnam, P. H., "Scholastic Achievement of General Educational Development Test Students at the Vanport Extension Center," School and Society, 66:161-163, August, 1947.
- Randolph, Victor R., "Some Characteristics of Veterans and Their Training Programs," School and Society, 67:338-342, May 1, 1948.
- Richardson, M. W. and Stalnaker, John M., "A Note on the Use of Biserial r in Test Research," Journal of General Psychology, 8:463, 1933.

Riemer, Svend, "Married Veterans are Good Students," Marriage and Family Living, IX-1:11-12, February, 1947.

Ritchie, Miller A. F., "Veterans as Postwar Students," Southern Association Quarterly, 9:295-305, August, 1945.

Russell, John Dale, "G. I's at College," National Parent Teacher, 40:16-18, April, 1946.

Sabine, Gordon A., "An Idea that Worked," Foreign Service, 34-1:17-19, September, 1946.

Sackett, E. B., "Fitting the Veteran to the Academic Mold," Occupations, 22:471-474, May, 1944.

Serviceman's Readjustment Act of 1944, Public Law 346 and The Act Providing for Vocational Rehabilitation of Disabled Veterans, Public Law 16. The 79th Congress, First session House Committee Print No. 120. Washington, D. C.: United States Government Printing Office, 1946. 34 pp.

Simmons, George E., "The Veterans as I See Them," Journal of Higher Education, XVII:315-318, June, 1946.

Spearman, Walter and Brown, Jack, "When the Veteran Goes to College," South Atlantic Quarterly, 45:31-42, January, 1946.

Stewart, Elizabeth D., "Post-College Achievement of Veterans of World War I Enrolled in the University of Colorado," School Review, 54:593-597, December, 1946.

Stewart, Elizabeth D. and Davis, Robert A., "Scholarship of World War I Veterans who Studied at the University of Colorado, 1919 to 1926," Journal of Educational Psychology, 37:53-57, January, 1946.

Taylor, Edgar A., "How Well are Veterans Doing?" School and Society, 65:210-213, March 22, 1947.

Tenney, Luman H., "Psychological Problems of the Discharged Veterans," 20:443-451, July, 1945.

Thompson, Ronald B. and Flesher, Marie A., "Comparative Academic Records of Veterans and Civilian Students," American Association of College Registrars Journal, 22:176-179, January, 1947.

Thompson, Ronald B. and Pressey, S. I., "Analysis of the Academic Records of 2,144 Veterans," Journal of American Association of Collegiate Registrars, 23:242-252, January, 1948.

- Tibbetts, Clark and Hunter, Woodrow W., "Veterans and Non-Veterans at the University of Michigan," School and Society, 65:347-350, May 10, 1947.
- Tyler, Ralph and Detchen, Lily W., "Evaluation of Educational Growth During Military Service," Public Personnel Review, 5:95-100, April, 1944.
- "Veterans and the Colleges," Association of American Colleges Bulletin, XXXIII:1, March, 1947.
- "Veterans at College," Life Magazine, 22:105-113, April 21, 1947.
- "Veterans Vocational Objectives," Higher Education, V IV:10, January 15, 1948.
- Waller, Willard, Veteran Comes Back. New York: The Dryden Press, 1944. 316 pp.
- Webb, Robert W. and Atkinson, Byron H., "The Veteran is in College," Journal of Higher Education, XVII-5:238-242, 282, May, 1948.
- Wector, Dixon, When Johnny Comes Marching Home. A Life in America Prize Book. Cambridge: Houghton Mifflin Company, 1944. 588 pp.
- Welborn, Ernest L., "Scholarship of Veterans Attending a Teachers College," Journal of Educational Research, 40:3:209-214, November, 1946.
- Wright, Wendell W., "Data on Veterans now Enrolled in Indiana University," School and Society, 61:245-246, April 26, 1945.

APPENDIX

MASK DEVICE USED FOR RECORDING DATA ON CARDS *

Case number					
	Marital status	Public Law	Age	Former student returned	Drop out reason
					Year
First semester C.P.A.		Second semester C.P.A.			Last semester year
High school R No. %		A. C. E. S Yr %			Nelson-Denny S Yr %

* Parallelograms indicate cut-out portion of mask.

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